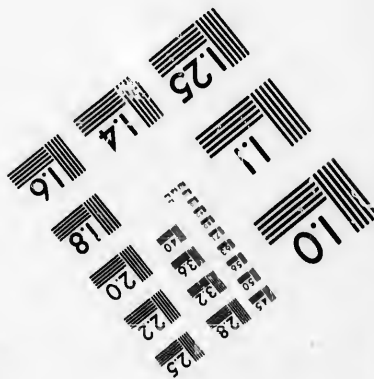
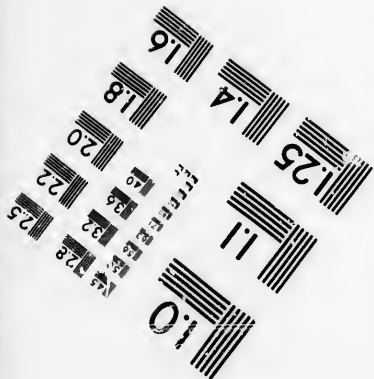
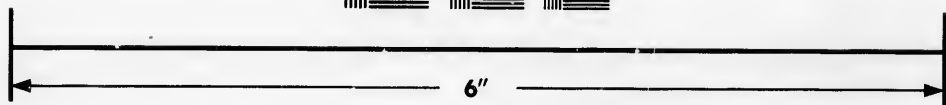
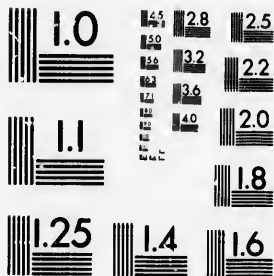


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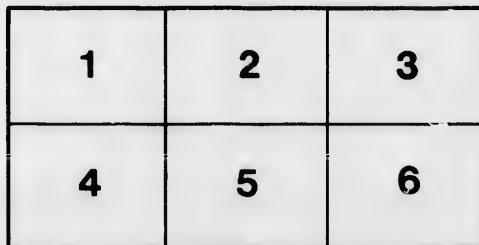
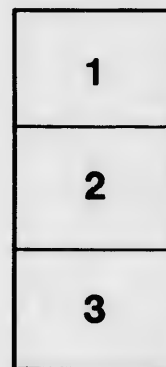
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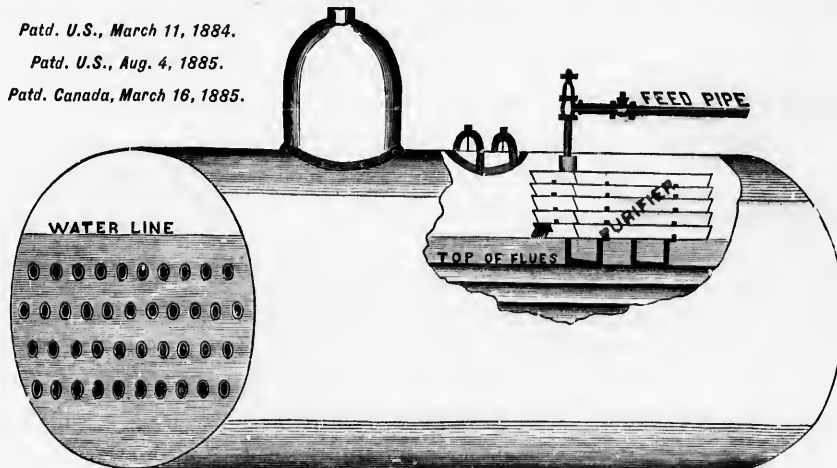
BRAUNINGER'S PATENT

# BOILER WATER PURIFIER

Patd. U.S., March 11, 1884.

Patd. U.S., Aug. 4, 1885.

Patd. Canada, March 16, 1885.



\* TO STEAM USERS \*

In offering you this WATER PURIFIER I would like to call your attention to a few points which make it far superior to anything heretofore offered in this line.

FIRST.—It works without any filter, which is liable to choke, and without chemicals of any kind, which would only injure the Boiler. **THE WATER IS SIMPLY HEATED SUFFICIENTLY TO FREE IT OF ALL SCALE** before admitting it to the main body of water in the Boiler.

SECOND.—It does this **WITHOUT ANY EXTRA COST**, as it is placed into the Boiler, where—when under working pressure—enough heat is always created to do the work of purifying the water thoroughly.

THIRD.—As the pans of the Purifier are placed above the water-line of Boiler they **CAN BE REMOVED, CLEANED AND REPLACED WITHOUT EMPTYING THE BOILER OF HOT WATER**, and this saves a certain amount of fuel every time the Boiler is cleaned, besides **AVOIDING UNNECESSARY COOLING OF BOILER**.

FOURTH.—This cleaning **CAN BE DONE SO QUICKLY** that considerable time is saved on every occasion.

FIFTH.—By **RETAINING ALL SCALE IN THE PANS**, and thereby **KEEPING FLUES AND SHELL PERFECTLY FREE FROM IT**, some **FUEL** certainly is **SAVED BY USING THE PURIFIER**, as **STEAM IS MADE QUICKER**.

The Testimonials, which you will find on third and fourth pages of this Circular, are proofs that the above is not exaggerated. Everybody desirous of keeping his Boiler clean would do well to buy one of these useful appliances. Any enquiries regarding it, addressed to the undersigned, will be promptly answered.

Respectfully,

J. W. HERMAN.

OFFICE: 114½ KING ST. WEST, TORONTO, ONT.

## TO PLACE PURIFIER INTO POSITION.

Enter feed A A (fig. 3) through shell back of man-hole, and near enough to it so that it can be easily reached with the hand from there (see fig. 1). Place stand (fig. 4) on flues directly under it, place lowest pan on stand with the cut out towards the end of Boiler, then the next pan with the opening ● (fig. 2) on the same end as cut out, but on the opposite side, and so on alternately until you come to the top pan. Before putting that into place adjust guard B (fig. 3) over feed A, push it up until it touches the shell, and fasten it there by pushing a small wedge between

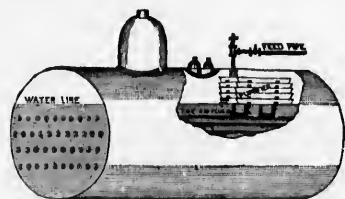


Fig 1.

the two pipes. Then put top pan into place, remove wedge and the guard B will drop with its feet onto the bottom of top pan, as shown by dotted line in C (fig. 3). When Purifier is in this position, and the water is turned on, it will feed into top pan C through E E (see fig. 3) until it rises to the line indicated in same figure (thus placing the feed entry under water), and then overflows into the next run, and so on to the end of the first pan, when it will pass through opening ● into the next below, and in this way through hall pans until it reaches the last, and then, being thoroughly heated and cleaned, enters the main body of water just at the water line of Boiler.



Fig. 2.

FIG 3: A detailed cross-sectional diagram of the purifier assembly. It shows a vertical feed pipe 'A A' passing through a curved guard 'B'. Below the guard is a pan 'C' containing water. The water level is indicated by a horizontal line. The feed pipe enters the pan through two small openings 'E E'. A dotted line shows the guard 'B' in its lowered position, resting on the bottom of the pan.

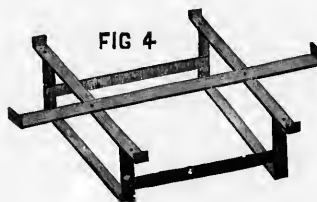
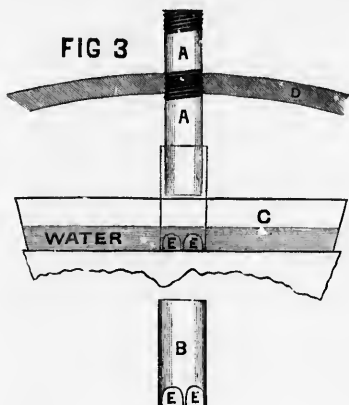


FIG 4



FIG 5

The water should be fed slowly, just as it is used, as nearly as possible **CONTINUOUS WHILE MAKING STEAM**, and should be turned off only when it rises higher than the bottom of Purifier, or at stopping time.

## TO TAKE THE PANS OUT TO CLEAN.

Lift up and fasten B, then pull top pan towards man-hole about 8 inches, enter the dipper, pass handle of dipper over the pan until the latter is well into the dipper, then lift both together towards man-hole, at the same time turning gradually downward until the pan can be turned upright and lifted out with the dipper. Then empty the dipper of water and sediment and enter again for next pan, and so on until all are brought out. Clean them and replace, and the sooner they are cleaned the quicker it can be done.

It is not possible to say exactly how often the pans should be taken out, as this entirely depends upon the amount and condition of water used.

**KEEP IN MIND THAT EVERY BOILER SHOULD BE CLEAN TO BE SAFE AND SAVING.**



# A FEW TESTIMONIALS



OFFICE OF CHAS. BOECKH & SONS,  
• *Brushes, Brooms, Woodenware, etc.*  
80 YORK ST.

FACTORY—142-150 ADELAIDE ST. WEST.

MR. J. W. HERMAN, TORONTO.

TORONTO, AUG. 25th, 1887.

DEAR SIR,—We have much pleasure in stating that we still have your Patent Boiler Water Purifier in our boiler, so that it has been in use over twenty-one months. We find it keeps our boiler perfectly free from scale, and we are extremely well satisfied with it, in fact we would not be without it, as it gives us perfect satisfaction in every respect. We can strongly recommend it to every manufacturer who wants to have his boilers clean and free of scale.

Yours truly,

CHAS. BOECKH & SONS.

OFFICE OF P. FREYSENG & CO.  
*Manufacturers and Importers of Corks.*  
QUERN ST. EAST, COR. SUMACH.

TORONTO, Aug. 26th, 1887.

MR. J. W. HERMAN, CITY.

DEAR SIR,—We have been using your Boiler Water Purifier for eighteen months and have much pleasure in stating that it has kept our boiler entirely free from scale. We are well satisfied with it, as it gives us perfect satisfaction in every respect, and can strongly recommend it to every manufacturer.

Yours truly,

P. FREYSENG & CO.

OFFICE OF JOHN DOTY ENGINE CO.  
COR. FRONT AND BATHURST STS.

TORONTO, Oct. 5th, 1886.

MR. J. W. HERMAN,

DEAR SIR,—I have much pleasure in stating that after examining your Boiler Water Purifier on various occasions can safely recommend it to users of steam. It is certainly very effective in its operation and simple in its application. As a preventative against the formation of scale I do not think there is anything better.

Yours respectfully,

JOHN DOTY ENGINE CO.

SIR ALEX. CAMPBELL, *President.*  
JNO. BLACKIE, *Vice-President.*

G. C. ROBB, *Chief Engineer.*  
A. FRAZER, *Sec.-Treas.*

THE BOILER INSPECTION AND INSURANCE COMPANY OF CANADA.

ALSO CONSULTING ENGINEERS.

HEAD OFFICE—*Public Library Building, Toronto, Ont.*

BRANCH OFFICE—*24 St. James St., Montreal, Que.*

MR. J. W. HERMAN, TORONTO,

TORONTO, March 1st, 1887.

DEAR SIR,—Your Boiler Water Purifier has been in use in some boilers, which are under the inspection of this Company. From what our Inspectors report, regarding the condition of these boilers, your apparatus, when properly attended to, evidently prevents the accumulation of scale. I believe it to be a simple and useful appliance for that purpose, if used according to your directions.

Yours very truly,

GEO. C. ROBB,  
*Chief Engineer.*

OFFICE OF J. P. WAGNER,  
*Manufacturer of Sashes, Doors, Blinds, Etc.*  
59-73 ADELAIDE ST. WEST.

J. W. HERMAN, ESQ.

TORONTO, April 29th, 1887.

DEAR SIR,—The Brauning's Patent Boiler Water Purifier you put into my boiler has so far given good satisfaction. It is a first-class arrangement for catching the sediment, as the water goes into the boiler it prevents it from getting to the bottom, and also from attaching itself around the tubes, and that means a saving of fuel, as well as saving the boiler, which is a great consideration. Hoping you may be able to do a good business in this line, I remain,

Yours truly,

J. P. WAGNER.

OFFICE OF A. R. CLARKE & CO.  
*Manufacturers of Morocco, Goat, Calf and Sheep Leathers,*  
28 FRONT ST. EAST.

WORKS—153-161 EASTERN AVE.

MR. J. W. HERMAN,

TORONTO, Aug. 19th, 1887.

DEAR SIR,—We have had one of Brauning's Patent Boiler Water Purifiers in one of our boilers for the past six months and find it keeps the boiler perfectly free from scale, and can recommend it for this purpose.

Yours truly,

A. R. CLARKE & CO.

OFFICE OF WILLIAM & J. G. GREEY,  
*Toronto Mill Furnishing Works,*  
2, 4 and 6 CHURCH ST., 25-48 ESPLANADE ST.

MR. J. W. HERMAN,

TORONTO, Aug. 22nd, 1887.

DEAR SIR,—We have been using your Boiler Water Purifier for nine months, and after examining it several times we find that it does just what you claim for it. As a preventative against the formation of scale we do not think there is anything in the market to equal it.

WM. & J. G. GREEY.

*Per T. MAGUIRE, Foreman.*

THE KNECHTEL FURNITURE CO.  
*Wholesale Furniture Manufacturers.*

J. W. HERMAN, TORONTO.

HANOVER, Ont., Aug. 22nd, 1887.

DEAR SIR,—In reply to yours of the 16th inst., we would say that we like your Patent Boiler Water Purifier very well, we clean it about once a month and the pans are full of dirt.

Yours truly,

THE KNECHTEL FURNITURE CO.

*Per R. J. B.*

When writing for price send the following measures :

- Diameter of Boiler.                      Diameter of Man-hole (length and width).  
Distance between upper row of Flues and top of Boiler.  
Size of Feed Pipe.

The Purifier consists of the following parts :

- FIRST.—An iron stand (see fig. 4).  
SECOND.—A number of heavy galvanized iron pans (fig. 2), (number according to size of Boiler) 24 inches long, 12 inches wide and 2 inches deep.  
THIRD.—A dipper (fig. 5) to lift the pans out when filled.  
FOURTH.—The feed nipple, A A, and guard against splashing, B (fig. 3). One check valve and one globe or angle valve are furnished with each Purifier.



